

Section C

Handouts and Activities

1. Creatine Handout
2. Folate Handout
3. Dayle Hayes' Resources / Handouts
4. Nutrition Jeopardy



"FOOD & FITNESS: HEALTH FOR A LIFETIME"

Eat Right America[®]

Creatine Fact Sheet

What is creatine? It's a natural substance found in fish and raw meat. It is also made by the human body and stored in muscle. Creatine is used during high intensity exercise. Most people consume about 1 gram of creatine per day through dietary sources.

What can creatine do for you? Studies have shown that athletes **may** improve their performance by supplementing their diet with creatine. Some studies have suggested that creatine seems to improve performance during activities that require short, intense bursts of energy such as sprinting or weight training.

Advantages

- * Potential for increased energy during activities requiring short bursts of effort
- * Increased muscle mass if used with strength training program
- * Improved cell hydration
- * Muscle fatigue occurs later

Disadvantages

- * Requires athletes to drink larger quantities of water
- * Potential for danger is still unknown due to its "newness"
- * Expensive; some doses cost up to \$7.50 per day
- * Does not work without a serious training program
- * Side effects from long term use are not known

If you are taking creatine, how much should you take? Creatine is purchased in powder form and taken with water or juice.

For rapid creatine loading

5 teaspoons (or a total of 25 grams) per day for 6 days (1 teaspoon 5 times/day)

Cost: about \$7.50 per day

For no-load creatine supplementation

2/3 teaspoon (3 grams) for 30 days

Cost: about \$1.10 per day

For maintenance (after 6 days of loading or 30 days of no-load supplementation)

1/2 teaspoon (2 grams) per day

Cost: about 75 cents per day

Will more creatine make you perform better? No. The body can only store a certain amount of creatine. Some studies suggest that taking more than 40 grams of creatine a day may cause liver or kidney damage in some people.

The Bottom Line: Creatine will not build muscles or improve performance on its own. To be effective, a training program must accompany creatine supplementation. Even then, the improvements in performance may be small. Twenty percent of people taking creatine do not respond to creatine supplementation and performance does not change.

Warning! Athletes of any age taking creatine should do so under the supervision of a health care provider. The detrimental effects of creatine are still unknown.

Source: *Running & Fit News*, July 1998

CAPT Lori Hennessy, RD

Are You Getting Enough Folate?



Folate is a very important B Vitamin. You must get folate through your diet. Your body can not manufacture folate. National data estimates 88% of U.S. adults consume LESS than the Daily Value of 400 micrograms of folate!

Why is Folate important?

- ♥ **It helps prevent birth defects**
Neural tube defects, such as spina bifida, are serious birth defects that can lead to infant death and disability.
- ♥ **May decrease heart disease risk**
Folate helps control homocysteine, an amino acid, which at high levels is a risk for heart disease and heart attacks.
- ♥ **May inhibit cancer**
Studies have shown an association between low folate intake and increase risk of certain cancers.

How Much Do You Need?

- ⇒ Males/Females
 - 9-13 yrs = 300 micrograms per day
 - 14 years & older = 400 micrograms per day
- ⇒ Pregnancy = 600 micrograms per day
- ⇒ Nursing = 500 micrograms per day
- ⇒
- ✓ REMEMBER:
- ✓ "5 A Day" - aim for getting at least five servings of nutrient rich fruits and vegetables a day.
- ✓ "Food First" - relying too much on supplements means you may be missing out

Some Good Sources of Folate

	Micrograms
Total Raisin Bran (1 cup)	400
Smart Start Cereal (1 cup)	400
Multi-Grain Cheerios (1 cup)	400
Product 19 (1 cup)	400
Lentils, cooked (1/2 cup)	179
Black-eyed peas, cooked (1/2 cup)	175
Oatmeal, cooked (3/4 cup)	150
Chickpeas, cooked (1/2 cup)	141
Sunflower seeds (1/2 cup)	136
Spinach, cooked (1/2 cup)	130
Kidney beans (1/2 cup)	115
Avocado, medium	113
Orange juice, 8 oz	109
Most cold breakfast cereals (1 oz)	100
Asparagus, 4 spears	88
Grapefruit/Pineapple juice (1 cup)	55
Broccoli, cooked (1/2 cup)	53
Wheat germ (2 Tablespoons)	50
Green peas/Brussels sprouts (1/2 cup)	50
Tomato juice (8 oz)	48
Orange, medium	40
White bread, fortified (1 slice)	38
Strawberries (1 cup)	26

- ✓ Look for legumes (dried peas & beans) such as lentils, kidney beans, chickpeas, or lima beans which are rich in folate, fiber and protein.
- ✓ Read food labels. Whole grains are now fortified with folate including pasta, rice

Moving Away from Diets:

Resources for a New Approach to Food, Weight and Fitness

BOOKS:

- Erdman, Cheri: *Nothing to Lose: A Guide to Sane Living in Large Body* (1995), Harper Publishing, San Francisco, CA
- Fraser, Laura: *Losing It: American's Obsession with Weight and the Industry That Feeds on It* (1997), Dutton, New York, NY
- Freedman, Rita: *BodyLove: Learning to Like Our Looks and Ourselves* (1989), Harper and Row, New York, NY
- Gaesser, Glen: *Big Fat Lies* (1996), Ballantine Books, New York, NY
- Goodman, W. Charisse: *The Invisible Woman: Confronting Weight Prejudice in America* (1995), Gurze Books, Carlsbad, CA
- Hirschmann, Jane and Munter, Carol: *Overcoming Overeating: Living Free in World of Food* (1989), Fawcett, New York, NY
- Hirschmann, Jane and Munter, Carol: *When Women Stop Hating Their Bodies: Freeing Yourself from the Food and Weight Obsession* (1995), Fawcett, New York, NY
- Hutchinson, Marcia Germaine: *Transforming Body Image: Learning to Love the Body You Have* (1985), Crossing Press, Freedom, CA
- Ikeda, Joanne: *Am I Fat? Helping Young Children Accept Differences in Body Size* (1992), ETR Associates, (800-321-4407)
- Kano, Susan: *Making Peace with Food* (1989), Harper-Row, New York, NY
- Loudon, Jennifer: *Women's Comfort Book* (1992), Harper-Collins, NY
- Lyons, Pat and Burgard, Debbie: *Great Shape: The First Fitness Guide for Large Women* (1990), Bull Publishing, Palo Alto, CA
- Marano, Hara Estroff: *Style is Not a Size: Looking and Feeling Great in the Body You Have* (1991), Bantam Books, New York, NY
- Omichinski, Linda: *You Count, Calories Don't* (1993), Tamos Books, Winnipeg, Canada (<http://www.hugs.com>)
- Omichinski, Linda and Wiebe-Hildebrand, Heather: *Tailoring Your Tastes* (1995), Tamos Books, Winnipeg, Canada (<http://www.hugs.com>)
- Roth, Geneen: *When Food is Love: Exploring the Relationship between Eating and Intimacy* (1992), Penguin, New York, NY
- Roth, Geneen: *When You Eat at the Refrigerator, Pull Up a Chair* (1998), Hyperion Books, New York, NY
- Tribole, Evelyn and Resch, Elyse: *Intuitive Eating: A Recovery Book for the Chronic Dieter* (1995), St. Martin's Press, New York, NY
- Wann, Marilyn: *FAT!SO? because you don't have to apologize for your size* (1998), Ten Speed Press, Berkeley, CA

NOTE: Many of these books are available through the Gurze Books Catalog, PO Box 2238, Carlsbad, CA, 92018, (800) 756-7533 (<http://www.gurze.com>)

MAGAZINES:

- *Big Beautiful Woman* (scheduled to begin publishing again soon)
- *MODE: The New Shape in Fashion*, PO Box 54275, Boulder, CO, 80323-4275, (888) 610-MODE
- *RADIANCE: The Magazine for Large Women*, PO Box 30246, Oakland, CA, 94604, (510) 482-0680, <http://www.radiancemagazine.com/>

NEWSLETTERS:

- *food for thought* and *Size Esteem* bulletins, Largesse: The Network for Size Esteem, PO Box 9494, New Haven, CT 06534-0404, Phone/fax (203) 787-1624

VIDEOS:

- *Body Trust: Undieting Your Way to Health and Happiness*, by Dayle Hayes, MS, RD, Body Trust Ltd., Billings, MT, (800) 321-9499
- *Chair Dancing*, (800) 551-4386
- *Collage Video*, (800) 4336769 for *Angela Lansbury's Positive Moves* and *Richard Simmons' Sweatin' to the Oldies*
- *Fat Chance: The Big Prejudice*, National Association to Advance Fat Acceptance book service, (916) 558-6880 (information also available on other books, videos and the NAAFA organization)
- *The Losing Game: A Video Exploring Weight, Dieting and Body Image Issues for Women*, Albritton TV Production, Fax (202) 354-7781
- *Yoga for Round Bodies*, (800) 793-0666 or (203) 456-0646

ELECTRONIC INFORMATION:

LISTSERVS:

- Fat Acceptance: To subscribe, send mail to: majordomo@world.std.com
In the body of Email message put: subscribe fat-acceptance

WEB SITES:

- Gurze Eating Disorder Bookshelf: <http://www.gurze.com/>
- Hugs International: <http://www.hugs.com/>
- International No-Diet Day: <http://www.eskimo.com/~largesse/INDD/>
- NAAFA: <http://naafa.org/>
- Largesse, A Network for Size Esteem: <http://www.eskimo.com/~largesse/>
- Radiance Magazine: <http://www.radiancemagazine.com/>

Moving Away from Diets: New Ways to Heal Eating Problems and Exercise Resistance
Helm Seminars, Publishing -- <http://www.helmnutrition.com/moving.html>

FEEDING YOUR BODY

Feeding your body means learning to enjoy the power of healthful eating. It means learning to relate to food as a nourishing friend, rather than a fattening enemy. It means giving yourself permission to enjoy all foods. Feeding your body means learning to fuel your body for health and wellness rather than therapy or recreation.

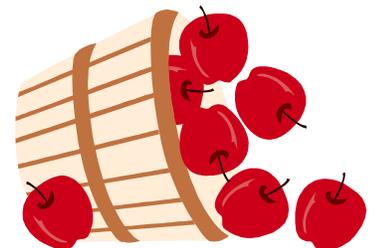
- Dump diets forever. Eliminate the word “diet” from your vocabulary and from your mind. Promise your body and your soul that you will never, ever, diet again.
- Legalize all food. Recognize that no food is good or bad. Fill your house, car, office and life with a wide variety of delicious foods that you love to eat.
- Eat when you are physically hungry and stop when you are satisfied. Use food to fuel your active lifestyle and to provide energy for all the activities you enjoy.
- Listen to your body carefully. Make eating a pleasurable, guilt-free experience. Take the time to check out how you really feel after eating different foods.
- Plan ahead. Take time to plan meals and snacks for yourself (and your family). Make great tasting, healthful eating a priority – even in the midst of a busy schedule.
- Slow down and savor the flavor of food. Treat every bite as a gourmet feast. The more time and attention that you give to food, the more satisfying eating is.
- Recognize the flexibility of normal eating. Normal eating means sometimes you may eat a little too much and sometimes you may not eat quite enough.
- Take a fresh look at nutrition. Enjoy plenty of fresh foods: fruits and vegetables (5 A Day for Better Health), whole grains, meats, poultry, fish, and dairy products.
- Read all about it. Carefully digest the details on food packages and labels – so you can get the best nutrition and health buy for your money.
- Experiment with new foods and new menus. Taste test the amazing variety of options in the supermarket – everything from star fruit to pretzel chips.
- Discover new recipes. Any recipe is just a beginning – an opportunity to adapt, modify or change ingredients to get great taste and good health in every bite.

Developed by Dayle Hayes, MS, RD -- Copyright 1999

Speaker, Author and Nutrition Therapist

3112 Farnam Street, Billings, MT, 59102

Phone: (406) 655-9082 Fax: (406) 656-0580 Email: EatWellMT@aol.com





MOVING YOUR BODY

Moving your body means returning to the joy of childhood play. It means forgetting all the “shoulds” and the rules about exercise. It means changing the concept from grueling workout to zestful playtime. Moving your body is also one of the best ways to keep physical hunger signals on cue and to naturally lift sagging spirits.

- Change the “E” word from exercise to enjoyment. Choose physical activities that you love to do. That way, you’ll never have to exercise a day in your life.
- Maximize your safety and comfort. Search out the right stuff. Look for equipment that works, shoes that fit, clothes that move with you, and locations that feel safe.
- Be flexible and jump into a variety of physical activities. Dance, garden, bike, swim, walk, or lift weights. Do what you enjoy and what fits with your lifestyle.
- Discover your power. Celebrate the inner strength and sense of well being that come from allowing your body to experience the joy of movement.
- Get physical with your family. The family that plays together stays together. Get your kids into the act early – and they’ll enjoy a lifetime of fitness and fun.
- Make fitness a top priority. Plan family and personal vacations around fitness, or invite a colleague to “do business” over a walk rather than lunch, coffee or drinks.
- Always carry a comfortable pair of shoes. With walking shoes on hand, you can take a fitness break instead of a coffee break, or explore an airport during a layover.
- Do it to music. Plug yourself in, and listen to music, news or books-on-tape. You may even decide to extend your activity – just to hear “the rest of the story.”
- Use personal muscle power for transportation. Bike to work or to the store, walk to lunch or to your next appointment, or get “in-line” and skate around town.
- Challenge yourself. Compete with yourself for a personal best – to do it better, faster, longer, or more gracefully. Celebrate every success, no matter how small.
- Listen to your body. Take rest days and change your activities based on what feels good at the moment. When it comes to fitness, “no pain, no gain” makes no sense.



LOVING YOUR BODY

Loving your body is hard in our fat-phobic, diet-obsessed world, but it is worth every ounce of effort that you put into it. It means accepting the diversity of human bodies. It means recognizing that no one should be discriminated against because of the shape her or his skin. Appreciating your body means learning to celebrate your unique abilities, and finally making friends with the mirror on the wall.

- Throw away the scale. Focus on fitness and weigh yourself only when medically necessary. Even then, you can choose to ignore the number if you want.
- Reject fat prejudice in yourself and in others. Recognize that healthy, beautiful bodies come in all shapes, sizes, and weights.
- Invest time and money in yourself rather than the diet industry. Spend your money on beautiful clothes, jewelry, haircuts, manicures and massages – not on diets.
- Surround yourself with size-friendly people. Choose friends, therapists and MDs who accept you the way you are and support the lifestyle changes you want to make.
- Stand tall and proud. Straighten your shoulders and your stance. Feel energy, strength and confidence flow from your head to your toes.
- Put your mind in touch with your body. To heighten your confidence and body awareness, check out yoga, walking meditation, t'ai chi, or movement therapy.
- Clothe your body in beautiful, comfortable clothes that fit now. Search out stores and catalogs that cater to people of your size, shape and fashion style.
- Join groups that promote size esteem. Look for local and national organizations that provide resources and support the natural diversity of sizes and shapes.
- Read magazines – like *MODE*, *Radiance: The Magazine for Large Women*, or *BBW: Big Beautiful Woman* – that feature average and large size women.
- Be patient with yourself. Old habits die hard and changes may take a while to become permanent fixtures in your thoughts and in your life.

MEMORANDUM FOR NATIONAL NUTRITION MONTH ORGANIZERS

SUBJECT: Nutrition Jeopardy

1. This letter introduces the attached Nutrition Jeopardy game, which you can use as a fun way to promote nutrition. This game originally came from Andrea Andrasi from Naval Supply Systems Command. USACHPPM used this educational tool at the field training exercise (FTX) in May 1999 and received rave reviews from the participants. Some of the definitions are very technical, so some easier hints were added to those.
2. Conduct the session similar to the television program (see attached rule sheet). There are four categories: Macronutrients; Vitamins; Minerals; Vocabulary. Each category has nine questions with the first being worth 100 and the last being 900 points. The questions get more difficult as the point value increases. There is also a bonus round and a final jeopardy round.
3. Display the categories and cards on a cork bulletin board. Print the categories, dollar amounts and questions on Avery white index cards #5388. Print the answers on the back of the questions. Laminate the cards so that they could be used again. There is a set of rules attached, but these can be changed to fit the situation. For example at the FTX, teamwork was the theme for the week. The rules were changed to promote collaboration among the groups. The game works well in a 40 minute session. The music is also available, and this really put the teams into the spirit of the event! The beauty of the game is that once it is put together, you can use it over and over again for different audiences. So use it and enjoy teaching nutrition!
4. The point of contact is LTC Sally Hoedebecke DSN 584-7007; CIV (410) 436-7007; or E-mail sally.hoedebecke@apg.amedd.army.mil.

3 Encls

SALLY S. HOEDEBECKE
LTC, SP
Chief, Fitness & Nutrition Service

USACHPPM's NUTRITION JEOPARDY RULES

May 1999

1. Divide into three groups and designate a spokesperson for each group.
2. The most junior spokesperson goes first.
3. To play, the junior spokesperson will select a category and dollar level. The announcer reads the description selected. The first spokesperson that raises their hand gets to answer the question first.
4. Each answer must be in the form of a question ie. "What is...?"
5. If the answer is correct, that spokesperson gets to select another category and dollar level. If the answer is incorrect, then a spokesperson from another team can try and answer the question. Etc.
6. You have 15 seconds to answer the question, and the time begins when the announcer begins reading the card. You have 30 seconds for the bonus and final jeopardy rounds.
7. Keep the scores visible at all times. The scorekeeper keeps a running total for each group. Scoring is simple...give points for each correct answer and take away points for each incorrect answer. Each bonus round is worth \$500. The announcer reads the description and each spokesperson writes their answer on a 3X5 card. For the final jeopardy round, the spokesperson writes both their team's wager and answer on a 3X5 card.
8. Team collaboration is highly encouraged! Therefore, groups can help their spokesperson come up with the answer. Remember to state your answer in the form of a question!
9. Let's begin.

ORIGINAL RULES

1. Divide group into 3 teams. A score keeper is needed to keep score and keep track of time. A facilitator is needed to read questions. Read the category descriptions (as some of the answers are stated in the descriptions).
2. Choose a team to go first.
3. That team chooses a question from the game board, by declaring category and points.
4. The person first in line gets 30 seconds to answer the question. If answered incorrectly the other two teams have the option of answering (first to ring bell).
5. Once a person has an opportunity to answer a question they rotate to the back of the line.
6. After 12 minutes the board portion of Jeopardy is over.
7. Bonus round/speed round consists of 4 questions: The question is read, the first team to ring the bell gets to answer, each question is worth 1000 points.
8. Final Jeopardy: The teams huddle (30 seconds), decide what the wager for this question will be. The question is read, each team gets to huddle (30 seconds) write their answer down on a sheet of paper (need unlined paper and black markers). Each team posts their answer and the facilitator provides the answer, points are tallied. The team with the most points wins!

CATEGORY

MICRONUTRIENTS / VITAMINS:

Vitamins are needed for their role in various processes such as digestion, absorption and metabolism of nutrients. There are two types of vitamins; fat-soluble and water-soluble

FAT SOLUBLE VITAMINS:

Vitamins A, E, D, and K are fat soluble, meaning they are derived from and transported throughout the body via fats. They are stored in the body and excessive intake may be toxic.

WATER SOLUBLE VITAMINS:

The B vitamins (niacin, riboflavin, thiamin, pyroxidine, cyanocobalamin), folacin and vitamin C are water soluble. Water soluble vitamins are not stored in the body, therefore they must be consumed daily. Excess acid, heat, alkali, air or light can destroy these vitamins. The following is a list of the most pertinent water soluble vitamins.

CATEGORY

MICRONUTRIENTS / MINERALS:

Minerals regulate body fluids, blood pressure and acid base balance. They are the structural component of teeth and bones, and assist in the formation and functionality of body tissues (cells, nerves, and muscles). Minerals are virtually indestructible. However, they may be processed out of foods when they are refined (i.e. flour) or dissolve into cooking liquid (which may discarded). Some mineral if taken in large amounts can be fatal. There are more than sixty minerals in the body, only twenty two are essential. Minerals are classified in two categories major and trace. Calcium, chloride, magnesium, sodium, phosphorus, and potassium are examples of major minerals.

Chromium, copper, fluorine, iodine, iron, selenium and zinc are examples of trace minerals, present in the body in minute amounts.

Helps promote healthy gums and teeth, assists in the absorption of iron, maintains normal connective tissue and heals wounds. Good sources are citrus fruits and juice, strawberries, tomatoes, broccoli, greens, sweet potatoes, white potatoes and cantaloupe.

(WHAT IS VITAMIN C?)

This vitamin promotes good night vision, helps form and maintain healthy skin, teeth, mucous membranes, skeletal and soft tissue. Found in some animal foods but mostly in dark green and yellow vegetables and fruits (carrots, sweet potatoes, pumpkin, spinach, broccoli, cantaloupe, pink grapefruit). Beta carotene, an antioxidant, is converted by the body into this vitamin. Good sources are carrots, sweet potatoes, dandelion, beet and turnip greens, spinach, arugula, butternut squash, hubbard squash, and red bell peppers.

(WHAT IS VITAMIN A?)

This vitamin is an antioxidant. It protects tissue against damage, helps in the formation of red blood cells and in the utilization of vitamin K. Good sources are vegetable oils, wheat germ, corn, nuts, seeds, olives, asparagus, spinach and other green leafy vegetables.

(WHAT IS VITAMIN E)

Promotes the absorption of calcium which is necessary for the development of bones and teeth, and helps maintain proper blood levels of calcium and phosphorous. Good sources are fortified milk, butter, margarine, cheese, cream, fish, oysters and fortified cereals. This vitamin is also synthesized by the body after exposure to sunlight.

(WHAT IS VITAMIN D?)

Plays a role in the synthesis of DNA (controls cell function and heredity as well as tissue growth), acts with B₁₂ to produce red blood cells and has antioxidant properties.

Good sources include dark green leafy vegetables, citrus fruits and juices, legumes, whole-grains, pork, poultry and shellfish as well as fortified cereals and baked goods.

(WHAT IS FOLACIN?)

This vitamin assists in clotting blood (stops bleeding). The intestines manufacture 80% of the body's requirements.

Good sources are cabbage, cauliflower, spinach and leafy vegetables, cereals, and vegetable oils.

(WHAT IS VITAMIN K?)

Helps convert carbohydrates into energy and is essential for production of red blood cells. Good sources are milk and dairy products, lean meats, eggs, nuts, green leafy vegetables, legumes and fortified bread and cereal.

What is another name for B₂?

(WHAT IS RIBOFLAVIN (B₂)?)

Deficiency of this vitamin could cause pellagree, (Dermatitis, diarrhea, dementia). Sometimes prescribed for people with high cholesterol / causes flushing of the skin. Helps to convert food into energy and maintains normal functioning of skin, nerves, and the digestive system. Good sources are nuts, dairy products, lean meats, poultry, fish and eggs, as well as legumes and enriched breads and cereals

(WHAT IS NIACIN B₃?)

Helps convert carbohydrates into energy, is necessary for proper functioning of the brain, nerve cells and the heart. Good sources are whole-grains, lean meat, fish, peas, dried beans, soybeans, peanuts, fortified breads, pasta and cereals.

(WHAT IS THIAMIN B₁?)

It is not found in plant products. Strict vegetarians may need to supplement with this vitamin. Aides in the formation of red blood cells and helps maintain the central nervous system. Good sources are milk and dairy products, eggs, meat, poultry and shellfish.

(WHAT IS CYANOCOBALAMIN B₁₂?)

Another name for this vitamin is Pyridoxine. It is not riboflavin, niacin, or thiamin. Plays an important role in the utilization of protein and the synthesis of antibodies in the immune system, helps maintain normal brain function and aides in the formation of red blood cells. Good sources are meats, fish, nuts, beans and other legumes, eggs, whole-grains, fortified breads and cereals as well as bananas.

(WHAT IS B₆?) (Pyridoxine)

Most Americans don't consume enough (especially women). Not only does it aid in building and maintaining strong bones and teeth, it aides in muscle contractions (heart beat) and is necessary for proper blood clotting. Although the body builds bones during childhood and adolescence, peak bone mass is not reached until age twenty-five or older. Bones continuously take in and release this. Therefore, adults continue to need a substantial amount.

Bone mass begins to decline at thirty five to forty years of age. At approximately the same time, the body no longer absorbs this efficiently. Vitamin D and lactose help improve the absorption of it. Good sources are dairy products, green leafy vegetables, broccoli, some tofu, canned sardines and salmon (eaten with their bones) and some fortified cereals. (WHAT IS CALCIUM?)

Helps regulate water balance and blood pressure. Only 5 to 10% of Americans are sensitive to it. For those people, it may elevate their blood pressure. Most Americans consume 2 to 3 times the recommended amount (no more than 4 gm/day). Sources include; table salt, cheese, smoked meats, soups, salty snacks, processed and “fast foods.”

(WHAT IS SODIUM?)

Utilized to form hemoglobin (carries oxygen in the blood) and myoglobin (carries oxygen in muscle). The heme form is found in animal products (meat) and is absorbed better by the body than the non-heme form, consume foods high in vitamin C at or around the same time. Good sources include organ meats, red meat, poultry, fish, eggs, peas, beans, nuts, dried fruits, green leafy vegetables, enriched pasta and bread, and fortified cereals. **(WHAT IS IRON?)**

Helps form bones and teeth. Main source is fluoridated water and foods grown or cooked in it, canned fish (including their bones) and tea.

(WHAT IS FLUORINE?)
(FLUORINE / FLUORIDE)

Necessary for proper muscle contraction and nerve impulses (functioning of the heart and kidneys). Along with sodium, calcium and magnesium, it helps regulate blood pressure and water balance within cells. Good sources include oranges, orange juice, bananas, potatoes (with skin), dried fruits, yogurt, meat, poultry and milk.

(WHAT IS POTASSIUM?)

Utilized by the thyroid gland to produce hormones (thyroxine and levothyroxine). Primary source is iodized salt, seafood, seaweed, dairy products, and crops from iodine rich areas.

(WHAT IS IODINE?)

Helps fight cell damage and may protect against certain cancers. Is utilized for proper functioning of the heart and immune response. Large doses can be extremely toxic. Good sources include fish, shellfish, red meat, grains, eggs, chicken, garlic and liver.

(WHAT IS SELENIUM?)

It is required along with calcium to mineralize bones. Utilized to produce energy, build bones and teeth, form cell membranes and genetic material. Good sources include; fish, meat, poultry, dairy products, eggs, peas, beans and nuts.

(WHAT IS PHOSPHOROUS?)

A component of gastric juices and assists the body in maintaining acid-base balance of bodily fluids. Primary source is table salt.

(WHAT IS CHLORIDE?)

It is a popular sports supplement. It is a cofactor for insulin and required for maintaining normal glucose metabolism. Used to break down carbohydrates and fats. Good sources include meats, whole-grains and fortified cereals.

(WHAT IS CHROMIUM?)

Helps form red blood cells and keeps the immune system, bones, blood vessels and nerves healthy. Good source include shellfish, beans, nuts, organ meats, whole-grains and potatoes. A deficiency of this mineral is rare in adults. It is an essential nutrient. This is not iron, it could be used to make coins.

(WHAT IS COPPER?)

A utilized for many metabolic functions, aids in bone growth, and assists in the functions of nerves and muscles (normal heart rhythm). Good sources include wheat bran, whole-grains, green leafy vegetables, meat, milk, nuts, bananas and apricots. Depletion of this mineral may cause GI abnormalities and fluid & electrolyte losses. Dietary deficiency is rare. Sometimes found in anti-acids.

(WHAT IS MAGNESIUM?)

The body needs these for energy. What is not used immediately is stored for later use. They come in two forms, simple and complex. Simple forms are sugars, while complex are starches such as those found in grains (cereals, breads, pasta, and rice) and starchy vegetables (peas, corn, beans and potatoes). The complex forms are low in calories (4 calories per gram) and often high in fiber. It is recommended that 55 to 60% of calories consumed should come from the complex form. The average American diet contains only 45%. To increase the complex form in the diet make potatoes, pasta or rice and a vegetable the main focus of each meal and treat the meat as a side dish. **(WHAT IS CARBOHYDRATES?)**

This nutrient is utilized to build, repair and maintain body tissue. Good sources are lean meats, fish, poultry, eggs, dairy products and legumes (dry beans and peas) as well as brown rice, barley and millet. They contain 4 calories per gram. Americans consumed should come from this nutrient. Many animal sources are also high in fat. Therefore a diet high in this nutrient may conversely be high in fat and may also place unnecessary strain on the kidneys.

(WHAT IS PROTEIN?)

This nutrient is essential for the absorption of certain vitamins. It contains 9 calories per gram. It is recommended to limit this nutrient to 30% of total calories consumed. By decreasing the amount in your diet you will actually be able to eat more foods to achieve the same amount of calories. To lose weight or maintain your ideal weight, get regular exercise, replace the nutrient with complex carbohydrates and cut back on sugars. The body for fuel uses this nutrient after carbohydrates and protein.

(WHAT IS FAT?)

These fats are usually solid at room temperature, and either contain cholesterol or cause the body to produce cholesterol. This fat comes from animal products, palm and coconut oils. A diet comprised of more than 10% of these fats causes an increased risk of heart disease and various types of cancer.

(WHAT IS SATURATED FATS?)

These fats are usually liquid at room temperature, and do not contain cholesterol. Studies have proven that, consuming these fats vice saturated fats may aide in decreasing blood cholesterol levels thus reducing the risk of heart disease. These fats come from corn, sunflower and safflower oils.

(WHAT IS POLYUNSATURATED FATS?)

These fats are usually liquid at room temperature, and do not contain cholesterol. These fats come from olive, peanut and canola oils are monounsaturated. These fats are almost as good at lowering cholesterol as polyunsaturated fats are.

(WHAT IS MONOUNSATURATED FATS?)

This is a form of fat that is produced in the body as well as ingested from the foods we eat. The small amount needed to aid in the absorption of vitamin D, is synthesized in the body. Because there is no need to consume it, it is recommended that less than 300 milligrams should be consumed from food sources. Hardening of the arteries (atherosclerosis) is the most common heart disease, where this substance in the blood sticks to the artery walls and hardens. This build up on the artery walls restricts blood flow and leads to heart disease by consuming a low fat, high fiber diet and exercising aerobically 3-4 times per week. Waxy substance that is produced. (WHAT IS CHOLESTEROL?)

The water-soluble content of a plant, that can be absorbed by the body. It is characterized by stickiness after cooking, (apples, oats, beans, peas, barley) often used to thicken foods. These fibers decreases the risk of colon cancer and digestive problems, lowers cholesterol, stabilizes diabetes, and provides a feeling of fullness (promoting weight control). **(WHAT IS SOLUBLE FIBER?)**

Deficiency of this vitamin is found most frequently in alcoholics. These fibers act like a broom on intestines, it is not absorbed by the body. It prevents digestive disease. It comes from peels, seeds, kernels, and fibrous parts of plants (fruits, vegetable and whole-grains). This fiber enhances good digestion and acts as a natural laxative to promote regular elimination. What is another name for B₁. **(WHAT IS INSOLUBLE FIBER?)**

Macronutrients

100

Macronutrients

200

Macronutrients

300

Macronutrients

400

Macronutrients

500

Macronutrients

600

Macronutrients

700

Macronutrients

800

Macronutrients

900

Vitamins

100

Vitamins

200

Vitamins

300

Vitamins

400

Vitamins

500

Vitamins

600

Vitamins

700

Vitamins

800

Vitamins

900

Bonus Round

Vitamins

500

Bonus Round

Vitamins

500

Minerals

100

Minerals

200

Minerals

300

Minerals

400

Minerals

500

Minerals

600

Minerals

700

Minerals

800

Minerals

900

Bonus Round

Minerals

500

Bonus Round

Minerals

500

Final Jeopardy

Minerals

Vocabulary

100

Vocabulary

200

Vocabulary

300

Vocabulary

400

Vocabulary

500

Vocabulary

600

Vocabulary

700

Vocabulary

800

Vocabulary

900

